A REVIEW OF THE SPECIFIC NAMES IN NORTH AMERICAN MIARUS (COLEOPTERA: CURCULIONIDAE)

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During a study of the immature stages of the North American species of the genera *Miarus, Mecinus,* and *Gymnaetron* (tribe Mecinini), it became evident that the status of most of the names proposed for North American species of *Miarus* was rather uncertain. Therefore, a study of the type specimens, and other material mentioned by the authors of those names, was undertaken. The synonymy proposed as a result of this study is presented below, with a discussion of each name following in subsequent paragraphs. Unless otherwise indicated, all specimens mentioned are located in the collection of the U. S. National Museum and have been examined by the writer.

Miarus Schoenherr, 1826

The original author of the name *Miarus* apparently is Schoenherr (1826, p. 320), as indicated by LeConte (1876), Pierce (1919), and Neave (1940), although Reitter (1907), Klima (1934), and more recent authors, such as Franz (1947) and Hoffmann (1958), have recognized Stephens (1831, p. 15) as the first author of that name.

Miarus hispidulus LeConte

- Miarus hispidulus LeConte, 1876, p. 221. Lectotype, here designated: Female, labeled "Ill."; second of four syntypes in J. L. LeConte collection; Museum of Comparative Zoology Type No. 5225.
- Miarus hispidulus Reitter, 1907, p. 46. (Described as a new species from "Andalusien"; type series not seen.) Preoccupied by Miarus hispidulus LeConte, 1876.
- Miarus hispidus Bovie, 1909, p. 17. (New name for Miarus hispidulus Reitter, 1907.)
- Miarus puritanus Casey, 1910, pp. 143-144. Type: Male, labeled "Mass."; U. S. National Museum Type No. 36782. (NEW SYNONYMY)
- Miarus consuetus Casey, 1910, p. 143. Lectotype, here designated: Male (?), labeled "Ks."; first of two syntypes in T. L. Casey collection; U. S. National Museum Type No. 36781.
- Miarus nanus Casey, 1910, p. 144. Type: Male (?), rostrum entirely missing, labeled "Mass."; U. S. National Museum Type No. 36783. (NEW SYNONYMY)
- Miarus illini Casey, 1910, p. 144. Type: Female, labeled "Ill.," pin also bearing a white paper disc with "6/20" on it; U. S. National Museum Type No. 36784. (NEW SYNONYMY)

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- Miarus micros (Germar), 1821, sensu Pierce, 1919, p. 36. [Misidentification]
- Miarus meridionalis (Brisout), 1862, sensu Pierce, 1919, p. 36. [Misidentification]

Miarus erebus Casey

Miarus erebus Casey, 1910, pp. 142-143. Lectotype, here designated: Female, labeled Mex. with a solid bar over e and x [from near Colonia Carcia, Sierra Madre Mts., Chihuahua, elev. 7,300 ft., collected by C. H. T. Townsend, according to the original description]; first of five syntypes in T. L. Casey collection; U. S. National Museum Type No. 36780.

DISCUSSION

Miarus hispidulus Reitter (renamed *Miarus hispidus* by Bovie, 1909) was first placed in synonymy with *M. hispidulus* LeConte by Pierce (1919) without any indication of the reasons for this action. More recently, Franz (1947), having seen some specimens evidently used by Reitter (1907) in describing his *Miarus hispidulus*, decided that those specimens are examples of *M. hispidulus* LeConte, which were actually collected in North America but not so labeled by the collector (G. Strobl), and presented to Reitter, who had mistakenly thought that they had originated in southern Spain and that they represented an undescribed species.

Examination of the type specimens of *Miarus puritanus* Casey, *M. illini* Casey, and *M. nanus* Casey, all of which were described from single specimens, revealed no features that would consistently separate them from *Miarus hispidulus* LeConte, as represented by the lectotype specimen and by 102 specimens in the National Museum collection. A survey of the latter material, collected at various localities from Michigan south to Florida, indicated that individual variation would account for the distinguishing features given by Casey (1910) for his *M. puritanus, M. nanus, and M. illini*.

For reasons rather uncertain to the writer, Leng (1920) listed *nanus* and *illini* as varieties of *puritanus*, but listed *M. consuetus* Casey as a variety of *M. hispidulus* LeConte. Klima (1934) apparently followed Leng (1920) in listing *M. illini* as a synonym of *M. puritanus*, but his reasons for placing *M. nanus* as a synonym of *M. meridionalis* (Brisout) are not evident to the writer.

The two specimens from Kansas, upon which Casey (1910) based his *Miarus consuetus*, do differ from most of the *Miarus hispidulus* specimens examined in having all-white vestiture arranged in single rows on most of the elytral intervals, rather than a mixture of brown and white (or pale gray) vestiture arranged in two or more rows on each elytral interval. However, these differences are not entirely consistent. A few specimens in the National Museum collection from Kansas and Iowa were found to agree in all respects with the lectotype of *M. consuetus*, but other specimens from the same area (particularly Lake Okoboji, Iowa) were seen to be

intermediate between them and most other specimens of M. hispidulus in having some brownish vestiture on the prothorax and elytra, or in having vestiture that is white but arranged in more than one row on each elytral interval. No differences in the genitalia of either sex or consistent differences in other characters, such as size and body shape, could be found between specimens agreeing with the lectotype of M. consuetus and examples conforming with the lectotype of M. hispidulus. Because of the lack of consistent differences between the specimens studied, M. consuetus and M. hispidulus are interpreted here as one species.

The two specimens from Winnipeg, Manitoba, identified as *Miarus* micros (Germar) by Pierce (1919) are also apparently representatives of *Miarus hispidulus* LeConte having whitish vestiture. They definitely do not agree with European specimens identified as *Miarus micros* in the National Museum collection, which have a yellowish decumbent vestiture, nor do they agree with Germar's (1821) original description of M. (then *Cionus*) micros, or with the more recent description and drawings of that species by Hoffmann (1958).

The single specimen from Douglas Co., Kansas, identified by Pierce (1919) as *Miarus meridionalis* (Brisout) does, as stated by Pierce, agree closely with the specimens described by Casey (1910) as *Miarus consuetus*, and is likewise interpreted here as an example of *Miarus hispidulus* Le-Conte having white vestiture.

Miarus erebus Casey is evidently a distinct species. The specimens in the type series are easily separated from *Miarus hispidulus* LeConte by the characters given in the key by Casey (1910), particularly by the long, white, erect vestiture of the prothorax (and to some extent, the elytra), which gives M. erebus a much more hirsute appearance.

LITERATURE CITED

BOVIE, A.

1909. Coleoptera, fam. Curculionidae: subfam. Gymnaetrinae, Genera insectorum, fasc. 92:1-20, 2 pls.

BRISOUT DE BARNEVILLE, H.

1862. Monographie du genre Gymnetron. Ann. Soc. Ent. France (Ser. 4) 2:625-668.

CASEY, T. L.

1910. On some new species of Balanini, Tychini, and related tribes. Canadian Ent. 42:114-144.

FRANZ, H.

1947. Beiträge zur Curculioniden-systematik I. Revision der europäischen Arten der Gattung *Miarus* Steph. Ann. Naturhist. Mus. Wien 55:210-249.

GERMAR, E. F.

1821. Genera quaedam Curculionitum proposita, et speciebus observatis illustrata. Mag. Ent. 4:309.

HOFFMANN, A.

1958. Coléoptères Curculionides (troisième partie). Faune de France, vol. 62, 1839 pp., illus.

KLIMA, A.

1934. Curculionidae: Gymnetrinae, Nanophyinae. Coleopterorum catalogus, pars 135:1-94.

LECONTE, J. L.

1876. In LeConte and Horn, The Rhynchophora of America North of Mexico. Proc. American Philos. Soc. 15:vii-xvi, 1-469.

LENG, C. W.

1920. Catalogue of the Coleoptera of America, North of Mexico. J. D. Sherman, Mount Vernon, N. Y., 470 pp.

NEAVE, S. A.

1940. Nomenclator zoologicus 3:1-1065.

- PIERCE, W. D.
 - 1919. Contributions to our knowledge of the weevils of the superfamily Curculionoidea. Proc. Ent. Soc. Washington 21 (2):21-36.

REITTER, E.

1907. Bestimmungs-Tabellen für die Curculionidengruppe der Mecinini (Gymnetrini) aus Europa und den angrenzenden Ländern. Verh. Naturf. Ver. Brunn 55:43-49.

SCHOENHERR, C. J.

1826. Curculionidum disposito methodica . . . , partem 4. Lipsiae. x + 338 pp.

STEPHENS, J. F.

1831. Illustrations of British entomology . . . Mandibulata, 4:1-366, pls. 20-23.

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